

## INFORMATION PAPER

DODVSA  
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SUBJECT: Canine Influenza Virus

1. Purpose. To provide background information on an emerging Canine Influenza virus.

2. Facts.

a. Overview. Canine Influenza virus (type A) is an emerging canine pathogen closely related to the H3N8 equine influenza virus and a member of the Orthomyxovirus family. It was first reported in Greyhounds at Florida racetracks in 2004, and hypothesized as a single interspecies transfer from the horse to the dog.

b. Natural Host/Animals affected. All canines are potentially susceptible since no neutralizing antibodies exist from vaccination or previous exposure

c. Transmission. Aerosol spread through coughing and sneezing, and direct contact with other infected dogs. The virus is very contagious and can be spread by humans physically carrying the virus on their hands/bodies from one dog to another (fomite transmission). The incubation period is 2-5 days. It is not transmissible to humans. There has been no documented case of a human infection in the equine version of this disease.

d. Clinical Features. The most common sign is a cough that can persist up to 3 weeks regardless of treatment +/- a purulent nasal discharge. More severely affected dogs exhibit a high fever (104-106) and can develop pneumonia. Only about 5% of cases progress to a fatal pneumonia. Morbidity is high and mortality is low. Early signs mimic a common syndrome called kennel cough, a mild respiratory disease caused by a myriad of infectious agents, primarily *Bordatella bronchiseptica*.

e. Diagnosis. The most reliable method is serology with paired serum samples taken 2-3 weeks apart and tested for viral antibodies. Sampling of serum with commercial ELISA tests, and virus isolation or PCR of pharyngeal swabs has not been successful in detecting virus.

f. Treatment. There are no proven effective drug therapies for the influenza virus; however, supportive care and antibiotics for secondary bacterial infections are effective.

g. Prevention. No vaccine is available, but work has begun to develop one. Good hand washing technique, avoidance of other dogs with clinical signs (although many dogs may have the virus but not show any overt clinical signs), and isolation of sick dogs is recommended. Pet owners should not panic, but continue in their routine activities and use common sense about taking their dog out in public. The "kennel cough" (*Bordatella bronchiseptica*) vaccine and parainfluenza vaccine are NOT cross protective for the canine influenza virus.

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